IMAMNAZAROV, N.; NABIYEV, M.N.

Corrosion resistance of some materials during the nitric acid decomposition of phosphates and potassium chloride. Uzb. khim. zhur. 7 no.4:6-10 '63. (MIRA 16:10)

1. Institut khimii AN UzSSR.

AZIZOV, Kh.F.; NABIYEV, M.N.

Relation between the exchange coefficient and certain factors in the ion-exchange process. Uzb. khim. zhur. 7 no.5:5-10 '63. (MIRA 17:2)

1. Institut khimii AN UzSSR.

NABIYEV, M.N.; KASYMOVA, M.A.

Synthesis of iron phosphates and their physicochemical characteristics. Uzb. khim. zhur. 7 no.6:9-13 '63. (MIRA 17:2

1. Institut khimii AN UzSSR.

AZIZOV, Kh.F.; NABIYEV, M.N., akademik

Study of the ion exchange process between KU-2 K-cation exchanger and MgSO solution. Dokl. AN Uz. SSR 20 n.1:17-19 '63.
(MIRA 16:6)

1. Institut khimii AN Uzbekskoy SSR. 2. AN Uzbekskoy SSR (for Nabiyev).

(Ion exchange)

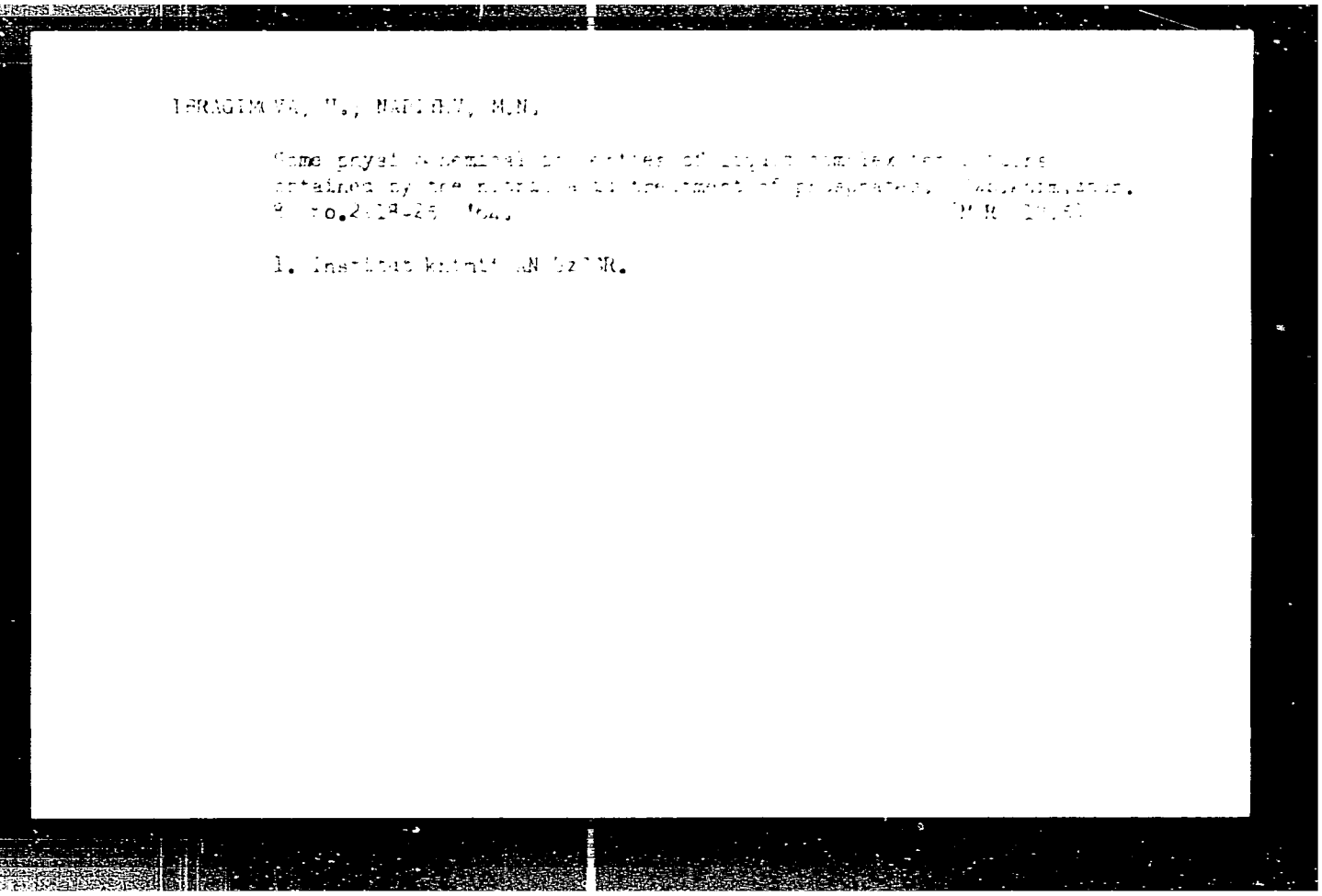
NABIYEV, M.N.; DUBOVAYA, V.K.

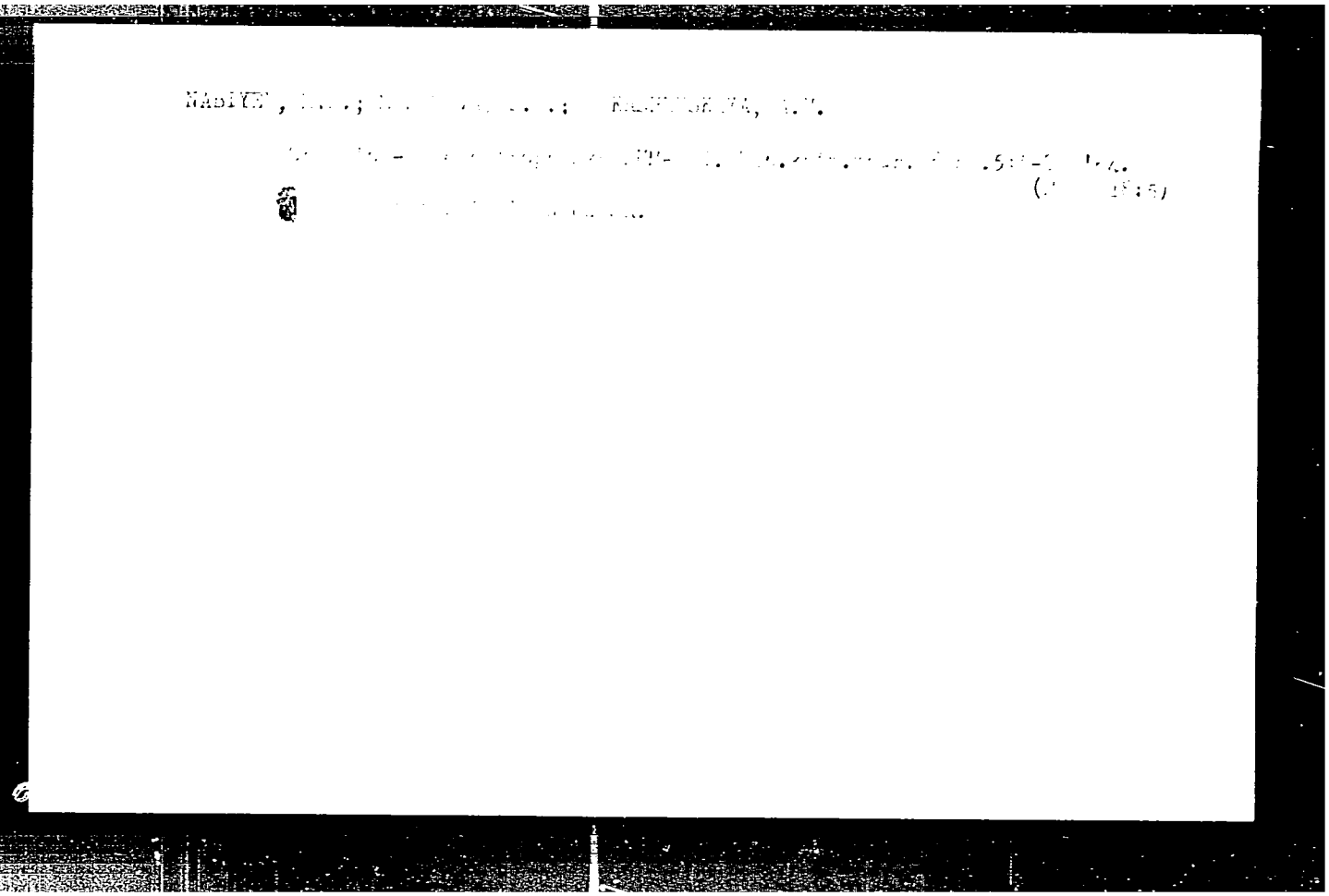
Processes of interaction of the products of nitric acid decomposition of Kara-Tau phosphorites with ammonia and sulfur dioxide. Zhur. prikl. khim. 36 no.9:1882-1889 D '63. (MIRA 17:1)

KASYMOVA, M.A.; NABIYEV, M.N.

Solubility of neutral iron phosphate in nitric acid at 25 and 50° in the system P_2O_5 - Fe_2O_3 - N_2O_5 - H_2O. Uzb.khim.zhur. no.1:37-39 '64. (MIRA 17:4)

1. Institut khimii AN UzSSR.





NABIYEV, M.N.

Acid processing [illegible] concentrates from Karatau phosphorites.
Uzb. khim. znur. 8 no.6:20-26 '64. (MIRA 18:4)

1. Institut khimii AN UzSSR.

TUKHSANOV, E.; NABIYEV, M.N.

Reaction of ammonium humate with $Ca_3(PO_4)_2$. Uzb.khim.zhur. 9 no.1:5-7 '65. (MIRA 18:6)

1. Institut khimii AN Uzbekskoy SSR.

KAMALOV, K.; VISHNYAKOVA, A.A.; IVANOV, V.P.; NABIYEV, M.N.; SADOVSKIY, K.D.; ROZENOVICH, V.A.; KALMANOVICH, L.A.

Development of the production technology for ammoniated superphosphate on the basis of a granulation equipment. Uzb.khim. zhur. 9 no.1:58-61 '65. (MIRA 18:6)

1. Institut khimii AN Uzbekskoy SSR.

TUKHSANOV, E.; VISHNYAKOVA, A.A.; NABIYEV, M.N., akademik

Effect of oxidized coals on the process of chamber superphosphate maturing. Uzb.khim.zhur. 8 no.4:12-17 '64. (MIRA 18:12)

1. Institut khimii AN UzSSR. Submitted July 24, 1963.
2. AN UzSSR (for Nabiyev).

NABIYEV, M.N., akademik; IBRAGIMOVA, U.I.; IL'YASOV, A.I.; RUBO, V.M.; NOVIKOVA, F.V.; GLAGOLEV, Ye.D.; GLAGOLEVA, A.F.; EYDEL'MAN, A.S., red.

[Liquid mixed fertilizers produced by treating phosphates with nitric acid] Zhidkie slozhnye duobreniia na osnove azotnokislotnoi pererabotki fosfatov. Tashkent, Izd-vo "Nauka" UzSSR, 1965. (MIRA 18:8)
402 p.

1. AN UzbekSSR (for Nabiyev). 2. Institut khimii AN UzbekSSR (for Ibragimova). 3. Chirchikskiy elektrokhimicheskiy kombinat (for Il'yasov.

VYZGO, V.S.; PAVLOVA, A.I.; NABIYEV, M.N.

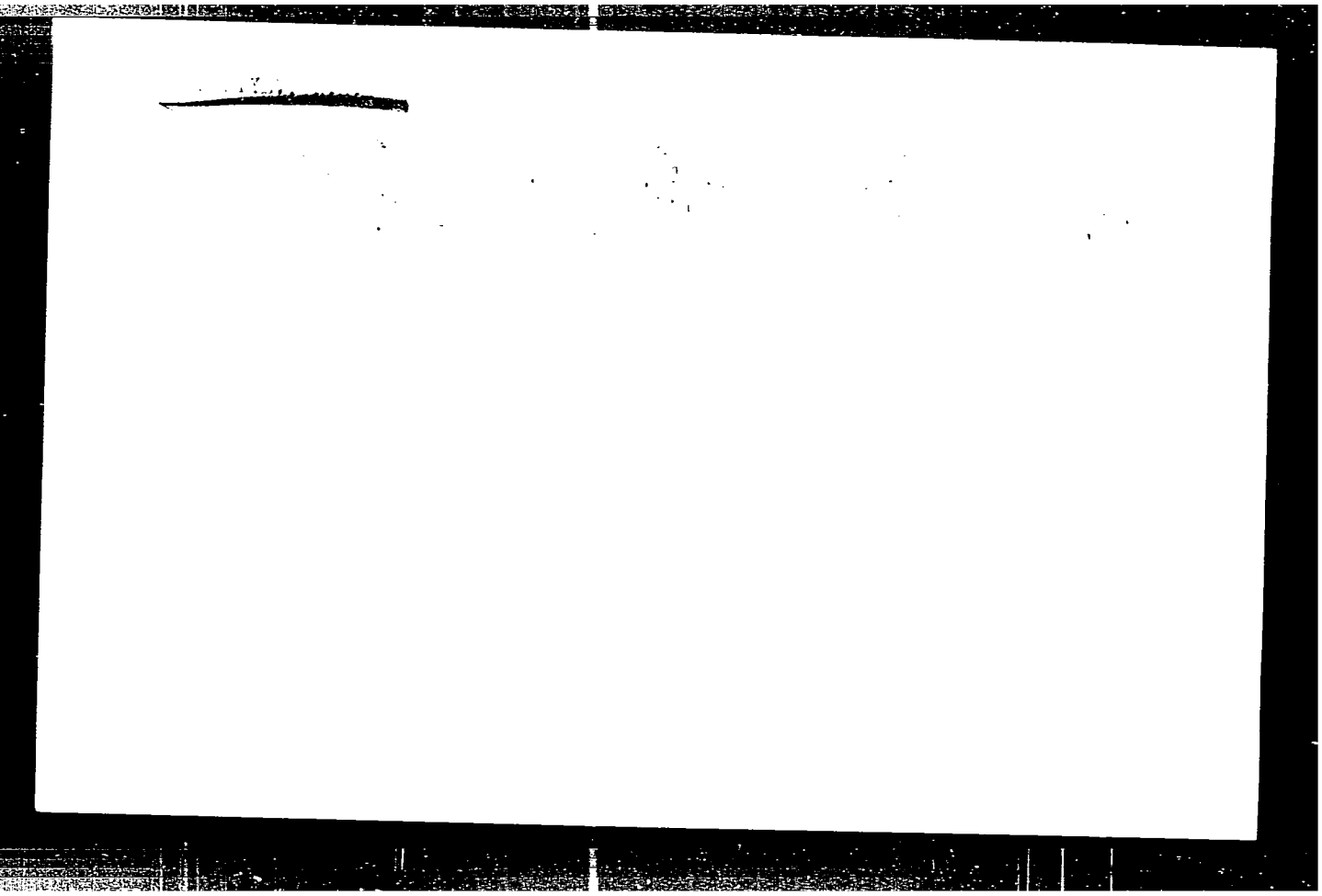
Possible intensification of the process of manufacturing fertilizers with the use of fluidization. Uzb. khim. zhur. no.4: 5-10 '65. (MIRA 18:12)

1. Institut khimii AN UzSSR. Submitted April 2, 1965.

AMIROVA, A.M.; NABIYEV, M.N.

Decomposition kinetics of [illegible] by nitric acid solution of potassium nitrate. Izv. AN Azerb. SSR. Ser. fiz.-mat. i tekh. nauk no.5:5-8 '65.

1. Institut khimii AN AzSSR. Submitted April [illegible], 1965.



APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135910007-4"

NABIYEV, N. A., Cand Geogr Sci -- (diss) "Economicogeographical characteristics and prospects of development of the economy of western Azerbaydzhan (within the ~~limits~~ of Kazakh, Akstafa, Tauz and Shamkhor rayons)." Baku, 1958. 24 pp (Min of Higher Education USSR, Azerbaydzhan State Univ im S. M. Kirov), 100 copies (KL, 16-58, 117)

HABIYEV, N.A.

Geographical names of the Azerbaijan S.S.R. Izv.AN Azerb.SSR. Ser.geol.-geog.nauk no.1:159-161 '58. (MIRA 11:12)
(Azerbaijan--Names, Geographical)

DENISOV, F.I.; NABIYEV, N.N.

Resuming exploitation of wells with a plunger lift. Azerb. neft. khoz. 39 no.12:32-34 D '60. (MIRA 14:9)
(Oil fields—Production methods)

NABIYEV, O.,

Trap for the Mediterranean fruit fly. Zashch. rast. ot vred. i bol. 10 no.7:48 '65. (MIRA 18:10)

1. Starshiy agronom-toksikolog TSentral'noy karantinnoy laboratorii Ministerstva sel'skogo khozyaystva SSSR.

MABIYEV, Yu.

Training of petroleum drillers. Prof. -tekh.obr. 11 no.2:29 '54.
(MLRA 7:6)

1. Direktor uchebno-kursovogo kombinata tresta "Stalinneft'" (g. Baku).
(Petroleum--Well-boring--Study and teaching)

NABIYEVA, M. A.

V

COUNTRY : USSR
CATEGORY : Pharmacology and Toxicology. Analgesics

ABS. JOUR. : RZhBiol., No. 5 1959, No. 23025

AUTHOR : Nabiyeva, M. A.
INST. : Samarkand Medical Institute
TITLE : Influence of Promedol upon the Motor Function of the Uterus in an Experiment

ORIG. PUB. : Nauchn. tr. Samarkandsk. med. in-t, 1957, 15, 233-236

ABSTRACT : 0.5-1 ml of 1% solution of promedol was introduced subcutaneously to pregnant and nonpregnant rabbits (15) anesthetized with urethane. In a majority of animals, an increase of the tonus of the musculature of the uterus, and an increase of the rhythm and amplitude of the contractions could be observed in all stages of pregnancy. In the postpartum period, promedol produced a sharp

Card: 1/2

V

COUNTRY :
CATEGORY :

ABS. JOUR. : RZhBiol., No. 5 1959, No. 23035

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : Increase of the amplitude of the uterine con-
cont'd tractions (up to 300%) with simultan ous slight
increase (up to 10%) of the general tonus of the
musculature of the uterus. In nonpregnant rabbits,
in half of the cases a slight increase of the ge-
neral tonus of uterine musculature, and in the
other half its decrease, were noted.

Card: 2/2

NABIYEVA, M. A.: Master Med Sci (diss) -- "Promedol as an anesthetic and labor accelerator". Samarkand, 195-. 13 pp (Samarkand Med Inst im Acad I. P. Pavlov), 200 copies (KL, No 9, 1959, 117)

NABIYEVA, M.A.

V

COUNTRY : USSR
CATEGORY : Pharmacology and Toxicology. Analgesics

ABS. JOUR. : RZhBiol., No. 5 1959, No. 23026

AUTHOR : Nabiyeva, M. A.
INST. : Samarkand Medical Institute
TITLE : Dynamics of the Excretion of Promedol in Parturients

ORIG. PUB. : Nauchn. tr. Samarkandsk. med. in-t, 1958, 16, 325-328

ABSTRACT : The content of promedol (P) in 24-hourly urine and the placenta was studied in 13 parturients. After a single injection of 2 ml of 1% solution of P, during the first 48 hours, 12-20% of P was excreted with the urine. In the placenta, 3-5% of P was found. Excretion of P did not cease until the last day of the stay of the parturients in the ward, and for 8-10 days about 50% of the

Card: 1/2

NABIYEVA, M.A., kand. med. nauk

Antitoxic function of the liver in late pregnancy toxicosis. Med. zh. Uzbek. 3:43-45 '63 (MIRA 17:2)

1. Iz kafedry akusherstva i ginekologii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent I.Z.Zakirov) Samarkandskogo meditsinskogo instituta imeni I.P.Pavlova.

[illegible], K. A.; MELIK-[illegible], [illegible]; N[illegible]BIY[illegible], [illegible]

[T]reatment of trach[o]ma with [bi]omy[c]in by perfo[r]at[ing] [illegible] of the eyelids. Azerb. med. zhur. [illegible] no.[illegible] [illegible]

[illegible]

IV

14-57-7-13306

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7, p 182 (USSR)

AUTHOR: Nabiyeva, Z. Yu.

TITLE: Subtropical Persimmons in Azerbaidzhan (Subtropicheskaya khurma v Azerbaydzhane)

PERIODICAL: Byul. Vses. n.-i. in-ta chaya i subtrop. kul'tur, 1956, Nr 3, pp 117-127

ABSTRACT: Next to Georgia, subtropical persimmons are most extensively cultivated in Azerbaidzhan. The oldest persimmon trees are found in the Zakataly-Nukha and Kirovabad-Akstafa districts. The author distinguishes four zones in which the persimmon can be successfully cultivated-- Zakataly-Nukha, Kirovabad-Akstafa, Nizmennyy-Shirvan, and Lenkoran'-Astara. He describes the climate and soils of these districts and the present condition of the persimmon trees.

Card 1/2

Subtropical Persimmons in Azerbaidzhan (Cont.)

Investigations have shown that there are ten types of persimmon in Azerbaidzhan. It is noted that Azerbaidzhan persimmons are of higher quality than those grown near the black Sea. The author concludes that the persimmon should be more extensively cultivated in the districts of the Azerbaidzhan SSR.

Card 2/2

A. K.

: [illegible]SR
: Cultivated [illegible] - Subtropical. Tropical. M

: [illegible] [illegible] [illegible], [illegible] 3, [illegible], 6357

: [illegible]abiyeva, Z.
: -
: [illegible] [illegible] [illegible] the [illegible] [illegible]ation of subtro[illegible] [illegible] [illegible] [illegible].

: [illegible] [illegible]. [illegible] [illegible], 1957, [illegible] [illegible], [illegible]-3[illegible]

: [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] trees. [illegible] [illegible] the best varieties of [illegible] [illegible] are [illegible]. [illegible] [illegible], [illegible], Fatenashi [illegible] [illegible] - [illegible] varieties - [illegible] [illegible], [illegible]ittel' [illegible], [illegible] - [illegible] by [illegible] male and female flowers, and serve as pollinators. With pollinati[illegible] the setting of fruits is sometimes [illegible] more than with parthenocarpallary formation. [illegible] star[illegible] an orchard of date palms, one pollinator tree is planted to 2 female trees. The yielding capacity of a tree is [illegible]0-150 kg. -- M. R. [illegible]iotic

[illegible] 1/1

NABIYEVA, Z. Yu., Cand Agr Sci -- (diss) "Subtropical persimmon in Azerbaydzhan." Mos, 1958. 19 pp (Mos Order of Lenin Agr Acad im K. A. Timiryazev), 110 copies (KL, 17-58, 110)

NABIYEVA, Z.Yu.

Drying the fruit of subtropical persimmon. Kons. i ov. prom. 13 no.9:22-24 S '58. (MIRA 11:10)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut sadovodstva, vinogradarstva i subtropicheskikh kul'tur.
(Persimmon--Drying)

30(1) SOV/26-59-2-36/53

AUTHOR: Nabiyeva, Z.Yu. Candidate of Agricultural Sciences

TITLE: Persimmon in Azerbaydzhan (Khurma v Azerbaydzhane)

PERIODICAL: Priroda, 1959, Nr 2, pp 109-110 (USSR)

ABSTRACT: The author surveys briefly the history and value of the subtropic persimmon (Diospyros kaki L.) and outlines the cultivation history of this fruit on the territory of the USSR. The largest persimmon plantations, up to 3,980 hectares, are in the Georgian SSR. In the Krasnodarskiy Kray the persimmon tree grows in the Sochi, Adlerovskiy and Lazarevskiy rayons. In the Crimea, the tree grows in the southern coastal regions. It is found at altitudes of up to 300 to 400 m above sea level in Dagestan. The persimmon tree is also being cultivated in the warmest districts of the Central Asian Republics. From 1938 on, the Azerbaydzhanskaya opytnaya stantsiya sukhikh subtropikov (Azerbaydzhan Experimental Station of the Arid Subtropics) started large-scale experiments with the persimmon tree in Geokchay, Yevlakh, Mir-Bashir,

Card 1/2

Persimmon in Azerbaydzhan

Kirovabad, Khachmas, Martuni and other places. Subsidiary places were opened in Tsnorisi-Tsikhisi and Signakhi in East Georgia, in Uzuntala in Armenia, and in Ogni in Dagestan. The trees that had been introduced from the Georgian Republic bore fruit during the third year upon plantation. At present the persimmon tree is being cultivated largely in certain basic zones of Azerbaydzhan, the zone of the arid subtropics near Kirovabad, Akstafa and the Shirvanskaya Steppe, the zone of the semi-arid subtropics near Zakataly and Nukha and the zone of the damp subtropics near Lenkoran' and Astara. The author concludes that the rich yields obtained hitherto have increased the prospects of an extended cultivation of the persimmon tree in the subtropic districts of Azerbaydzhan. There is 1 photograph.

ASSOCIATION: Azerbaydzhanskiy nauchno-issledovatel'skiy institut sadovodstva, vinogradarstva i subtropicheskikh kul'tur - Baku (Azerbaydzhan Scientific Research Institute for Horticulture, Viticulture and Subtropic Cultures - Baku)

Card 2/2

VAKHTANOV, B.F.; ZORIN, K.K.; NABKHIN, B.M.

Use of manipulators in forges. Kuz.-shtam.proizv. 2 no.1: 23-27 Ja '60. (MIRA 13:5)
(Forge shops--Equipment and supplies)

NABOBO, S.S.

Features in the development of the electric power system of Alma-Ata.
Trudy Inst. energ. AN Kazakh. SSR 2:82-87 '60. (MIRA 15:1)
(Alma-Ata--Electric power)

NABOK, I.F.

Treatment of cracked nipples with biomycin ointment. Ped., akush. i gin. 23 no.4:60 '61. (MIRA 17:1)

1. Borislavskiy rodil'nyy dom (glavnyy vrach - M.V.Mrikh [Mrykh, M. V.].)

NABOK, I.F. (Borislav)

Case of adiposogenital dystrophy in combination with gigantism, following dysenterial meningitis. Probl.endok.i gorm. 7 no.4:107 '61. (MIRA 14:8)

1. Iz Borislavskogo mezhrayonnogo protivozobnogo dispansera.
(DYSTROPHY) (DYSENTERY) (MENINGITIS)

NABOK, I. F.

Rare course in Addison's disease. Vrach. delo no.7:1?2 Jl '62.
(MIRA 1?:7)

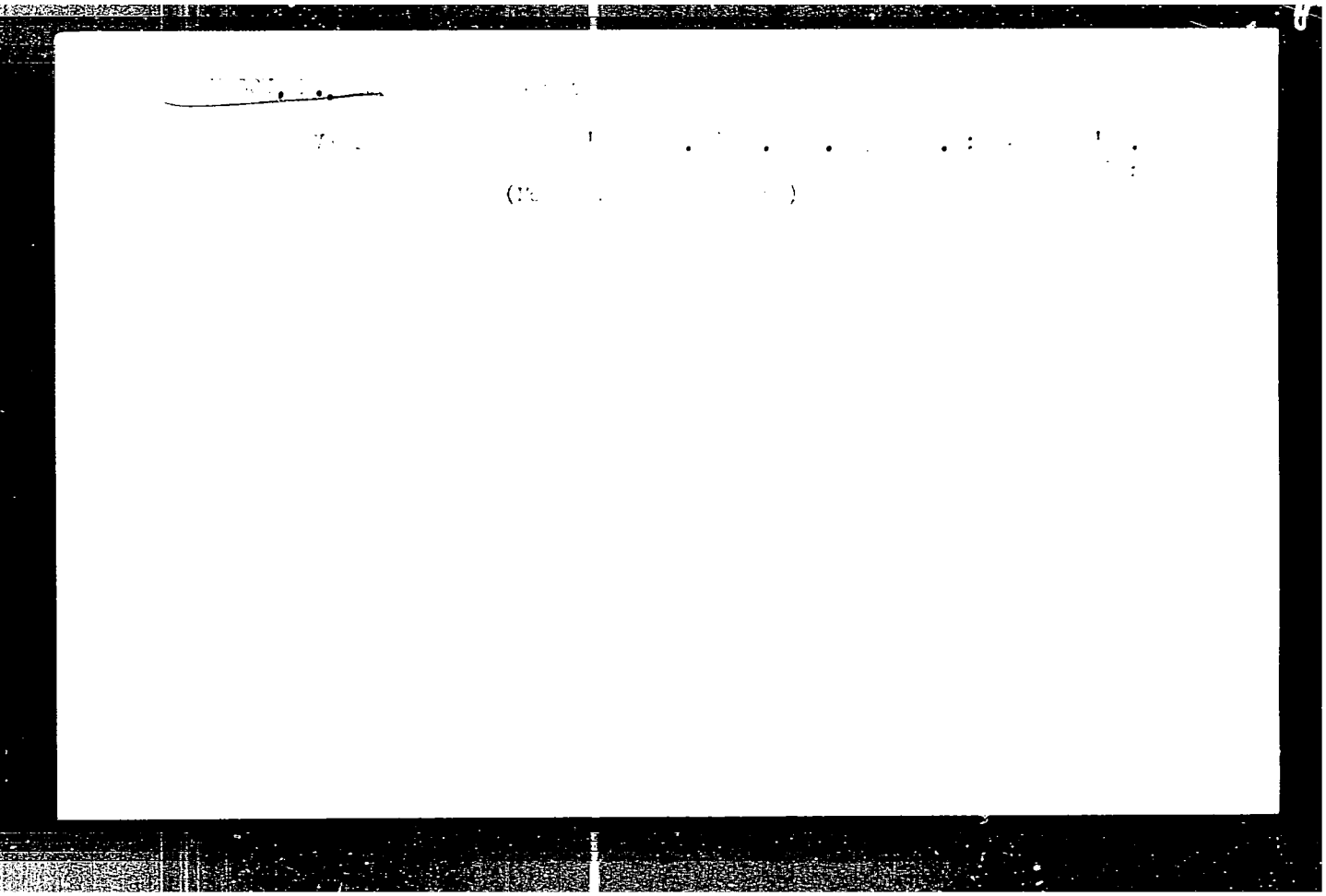
1. Borislavskiy mezhrayonnyy protivozobnyy dispanser.

(ADDISON'S DISEASE)

UDOD, V.M.; NABOK, I.F.

Esophageal diverticulum developing in connection with a nodular goiter. Zdrav.Bel. 8 no.12:68-69 D '62. (MIRA 16:1)

1. Borislavskiy mezhrayonnyy protivozobnyy dispanser (glavnyy vrach V.M.Ukhod).
(ESOPHAGUS--DIVERTICULA)(GOITER)



NABOK, L., kand. tekhn. nauk

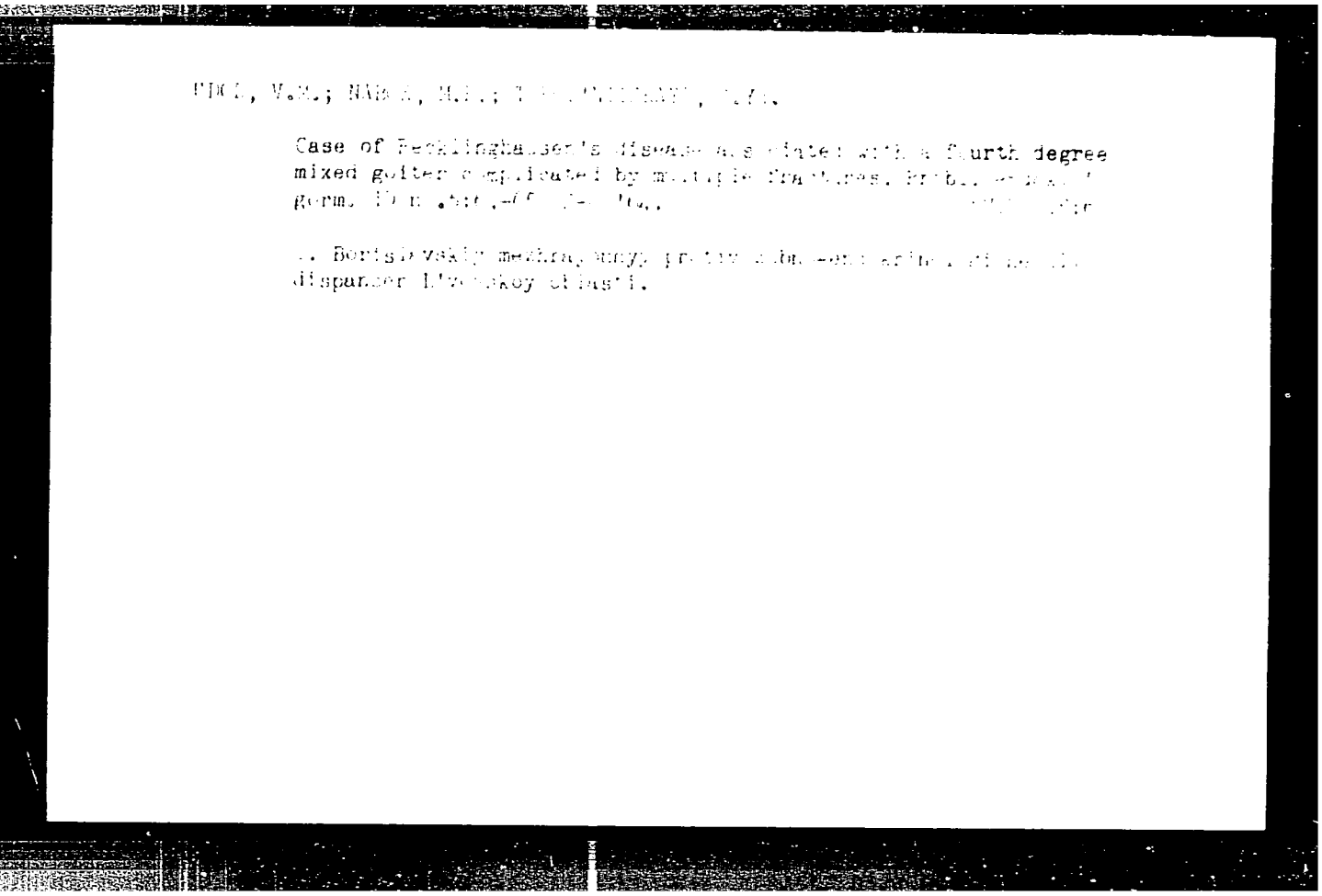
The term "deviation in radio direction finding" and how it is understood. Mor. flot 19 no.5:45 My '59.
(MIRA 12:7)

(Radio in navigation)

NABOK, L.F., ispolnyayushchiy obyazannosti dotsenta, kand. tekhn. nauk

Method of maneuvering to remove ambiguity in position determination by hyperbolic phase radio navigation. Sudovozhdenie no.4:61-63 '64. (MIRA 18:3)

1. Kafedra radionavigatsionnykh ustroystv Leningradskogo vysshego inzhenernogo morskogo uchilishcha imeni admirala Makarova.



Case of Perkinghausen's disease associated with a fourth degree mixed gutter complicated by multiple fractures, [illegible]

.. Borisovskiy meditsinskiy [illegible] dispanser [illegible]

UDOD, V.M.; NABOK, M.F.

Rheographic indices in diseases of the thyroid gland. Probl. onkol. i gorm. 10 no.6:14-17 N-D '64. (MIRA 18:7)

1. Borislavskiy mezhrayonnyy protivozobno-endokrinologicheskiy dispanser L'vovskoy oblasti.

NABOK, M.F.

Organization of the Borislav stratal waters treatment on a community basis. Vop. kur., fizioter. i lech. fiz. kul't. 29 no.4:361-362 Jl-Ag '64. (MIRA 18:9)

1. Mezhrayonnyy protivozobnyy dispanser goroda Borislava L'vovskoy oblasti.

NABOK, M.P.

Use of Borislav oil field waters in the compound therapy of trophic leg ulcers. Vest.derm. i ven. 38 no.5:55-58 My '64.
(MIRA 18:12)

1. Mezhrayonnyy kozhno-venerologicheskiy dispanser, Borislav.
Submitted June 17, 1963.

ACCESSION NR: AP4042341 S/0138/64/000/007/0048/0049

AUTHOR: Nabok, N. I.; Timoshina, N. P.

TITLE: Treatment of steel fittings for the bonding of rubber to metal with adhesives in the manufacture of rubber stuffing boxes

SOURCE: Kauchuk i rezina, no. 7, 1964, 48-49

TOPIC TAGS: rubber stuffing box, rubber to metal banding, adhesive, FEN-1, metal surface treatment, degreasing, parkerizing, coating, vulcanization, bonding strength, adhesion strength

ABSTRACT: The Moscow Industrial Rubber Products Plant has mechanized the treatment of steel fittings for the bonding of rubber to metal with adhesives in the manufacture of rubber stuffing boxes. The metal surface is treated as follows: 1) twofold degreasing with agitation (bubbling of hot air) for 2—3 min at 85—90C; 2) careful washing with hot (50—60C) running water; 3) parkerizing for 5—7 min at 60—70C with a solution of 1 part zinc monophosphate (96 g-l) and sodium nitrate (128 g-l) in 3 parts of water; 4) washing with cold and then hot (50—60C) running water; 5) drying in hot air at

Card 1/2

SHCHABLOV, N.; LEKONTSEV, V.; NABOK, P.; VOTRIN, P. (Omskaya obl.); TALUBAYEV, S. (Omskaya obl.); TUGULEV, A. (Tatarskaya ASSR)

Volunteers at work. Pozh. delo 9 no.6:4 Je '63.
(MIRA 16:8)

1. Zamestitel' nachal'nika Otdela pozharnoy okhrany Vologodskoy oblasti (for Shchablov). 2. Starshiy inspektor gorodskoy pozharnoy chasti, Votkinsk, Udmurtskaya ASSR (for Lekontsev). 3. Starshiy inspektor Otdela pozharnoy okhrany, Kirov (for Nabok).

NABOK, V.S., inzh.

Lumber cargoes. Trudy TSNIIVEVT no.13:7-58 '58. (MIRA 11:12)
(Lumber--Transportation)

NABOKA, M.

Window blocks made of cement wood. Sil'.bud. 12 no.7:16-17 Jl '62. (MIRA 15:8)

1. Glavnyy inzh. Chernigovskogo oblastnogo mezhkolkhozstroya.
(Windows) (Precast concrete construction)

33358
S/181/62/004/00[illegible]
B104/B102

187530

AUTHORS: Palatnik, L. S., Gladkikh, N. T., and Naboka, M. N.

TITLE: Second (lower) temperature limit of In, Sn, Pb and Bi condensation

PERIODICAL: Fizika tverdogo tela, v. 4, no. 1, 1962, 202 - 206

TEXT: The lower temperature limits of condensation of In, Sn, Pb and Bi were determined by evaporation and condensation on non-uniformly heated polished copper bases (120-10.1 mm). The evaporation rates were between 10^{-5} and 10^{-3} g/cm^2 sec. As was shown in previous experiments the condensate on the Cu plate consists of two bright and an intermediate mat section (L. S. Palatnik et al., DAN SSSR, 124, 808, 1960; DAN SSSR, 140, 567, 1961). In the mat section that corresponds to a certain temperature interval of the Cu plate two condensation processes take place: gaseous ⟶ solid and gaseous ⟶ liquid ⟶ solid. This condensation is termed microheterogeneous condensation. The lower temperature limit Θ_2 of condensation lies within the mat section. If the temperature of the Cu plate is lower than Θ_2 the

Card 1/3

33358
S/181/62/004/001/041/05
B104/B102

Second (lower) temperature

metals crystallize gaseous ⟶ liquid; at temperatures above Θ_2 the metals crystallize gaseous ⟶ solid The ratio Θ_2/T_s where T_s is the melting temperature of the metal is independent of the type of the metal and almost always 1/3 The temperature interval of microheterogeneous condensation $\Delta\Theta_2 \approx 15 - 30^\circ C$ In the region of the upper critical limiting temperature also a region of microheterogeneous condensation exists: $\Theta_2/T_s \approx 2/3$ is given for the upper critical limiting temperature There are 3 figures, 1 table, and 5 Soviet references.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Kharkov State University)

SUBMITTED: July 27, 1961

Card 2/3

33358
S/181/62/004/001/031/052
B104/B102

Second (lower) temperature ...

Table. Characteristics of In, Sn, Pb, Bi condensation. Legend: (1) metal; (2) type of lattice; (3) melting temperature (in °K); (4) boiling temperature (in °C).(5) T_{k1} temperature corresponding to the transition from vaporous ⟶ crystalline to vaporous ⟶ liquid condensation (in °K).

(1) Металл	(2) Тип решетки [*]	(3) $T_п$, °K [*]	(4) $t_{кип.}$, °C [*]	(5) $T_{к.1}$, °K [*]	$\frac{T_{к.1}}{T_п}$ [*]	δ_t, °C	δ_t, °K	$\Delta\Theta_2^\circ$	$\frac{\Theta^\circ, °K}{T_п, °K}$
Pb	K12	600	1750	413	0.69	— 72	201	15	0.335
Bi	R3	544	1470	370	0.68	— 90	183	15	0.336
Sn	T4	505	2337	248	0.69	—103	170	30	0.336
In	T4	429.4	2100	—	—	—130	143	25	0.333

Card 3/3

L 52522-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD UR/0181/65/007/004/1105/1109

ACCESSION NR: AP5010719

17
15
B

AUTHOR: Palatnik, L. S.; Gladkikh, N. T.; Naboka, M. N.

TITLE: On the condensation diagram of Bi-Sb alloys

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1105-1109

TOPIC TAGS: bismuth compound, alloy condensation, condensation diagram, microhardness, thermal emf, phase composition

ABSTRACT: This investigation is analogous to an earlier study (DAN SSSR v. 140, 1297, 1961) of Cu-Ni alloys, except that the condensation diagram was plotted in a temperature region in which an increase in temperature is accompanied by a change in the condensation mechanism from direct crystallization from the vapor to a crystallization via the liquid phase. The authors measured the microhardness, thermal emf, and phase composition of Bi and Sb condensates with different compositions, prepared by simultaneous evaporation and condensation of the components in vacuum (10^{-5} mm Hg) at substrate temperatures 80, 120, 170, and 220C. The alloy preparation and the measurements are briefly described. The results are illustrated in

Card 1/3

L 52522-65

ACCESSION NR: AP5010719

Fig. 1 of the Enclosure and show that the condensation of alloys of variable composition, whose components have unlimited mutual solubility in the liquid and solid states, is well described by a "cigar-shaped" condensation curve both in the upper temperature interval (substrate temperature approximately 2/3 the melting temperature of the alloy), as in the present experiment with Bi-Sb, and in the lower interval (approximately 1/3 the temperature) as found in the earlier investigation of the Cu-Ni alloy. Orig. art. has: 5 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University)

SUBMITTED: 19Oct64 ENCL: 01 SUB CODE: SS

NR REF SOV: 009 OTHER: 000

Card 2/3

L 52522-65

ACCESSION NR: AP5010719

ENCLOSURE: 01

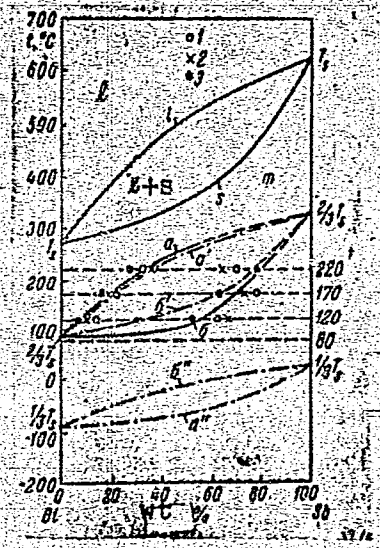


Fig. 1. Melting diagram (ℓ - s) and condensation diagram (a - b) of Bi-Sb.

1 - Microhardness, 2 - x-ray data, 3 - thermal emf.

The dash-dot lines show the calculated condensation diagram for a substrate temperature approximately two-thirds the melting temperature (a'-b') and approximately one-third the melting temperature (a - b).

Card 3/3

L 57579-65 EWT(l)/EWT(m)/EWP(i)/EPF(n)-2/EWG(m)/T/EWP(t)/EEC(b)-2/EWP(b)/EWA(c)
Pu-4 IJP(c) RDW/JD/JG/GG
ACCESSION NR: AP5013719 UR/0070/65/010/003/0399/0404
548.526

40
37
8

AUTHOR: Palatnik, L. S.; Naboka, M. N.; Gladkikh, N. T.

TITLE: The aging of vacuum condensates

SOURCE: Kristallografiya, v. 10, no. 3, 1965, 399-404

TOPIC TAGS: vacuum metallurgy, alloy film, thin film

ABSTRACT: The following were investigated: a) phase transformations in heavy Cd-S and Sb-Se alloy films (h ~ 80 μ) of variable concentration resulting from their aging at room temperature for a period of 2 and 5 years respectively; b) the condensation mechanism and structural variations in condensates of pure sulfur during prolonged aging. Cd-S alloy samples of variable composition were prepared by the simultaneous evaporation and condensation of components on an etched glass base. In the investigation of pure sulfur condensation mechanism the samples were prepared on an amorphous (glass) and polycrystalline (molybdenum) base while a temperature gradient was maintained. One end of the base was cooled by liquid nitrogen while the other was maintained at 20°C. The microstructure of the sulfur conden-

Card 1/2

3

sates was investigated by means of the MIM-8 optical microscope. It was established that in the initial period where the temperature of the glass base was 20°C the condensation of sulfur was from vapor to liquid. At -80°C the condensation was from vapor to crystal. The growth of spherulites was observed during condensation in sulfur films on a molybdenum base at -80°C and in Cd-S, Zn-S and Sb-Se-S alloy films on a glass base at 20°C. It was established that the aging of the Cd-S solid solution for a period of two years at room temperature was accompanied by the growth (liberation) of thread-like (5-18% S) and cone-like (18-50% S) cadmium crystals while in alloys with a high sulfur content (70-80% S) by the growth of sulfur polycrystals. When Sb-Se alloys were aged, thread-like antimony crystals were liberated. Orig. art. has: 6 figures, 1 table.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Kharkov State University); Politekhnicheskiy institut im. V. I. Lenina (Polytechnic Institute)

SUBMITTED: 01Jul64 ENCL: 00 SUB CODE: MM

NO REF SOV: 009 OTHER: 000

L 00733-66 EWT(m)/EWP(i)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5022738 UR/0181/65/007/009/2850/2852

AUTHOR: Palatnik, L. S.; Gladkikh, N. T.; Naboka, M. N. 44,55 44,55 44,55

TITLE: Zinc sulfide-cadmium sulfide and variable composition zinc-cadmium-sulfur condensed films

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2850-2852

TOPIC TAGS: zinc sulfide containing alloy, cadmium sulfide containing alloy, polycrystalline film, semiconducting film, cadmium sulfide, zinc sulfide, ternary alloy, alloy composition, phase composition, alloy phase diagram, cadmium compound, zinc compound, zinc alloy, cadmium alloy, alloy system, thin film, thin film deposition, quasibinary alloy 44,55

ABSTRACT: Thin (15—20 μ) sulfide films have been vacuum deposited by simultaneous vaporization of either ZnS and CdS or their components in variable proportions on a frosted glass substrate which had a temperature of 20 or 80—100C. The films were composed of quasibinary ZnS—CdS alloys or ternary Zn—Cd—S alloys of variable composition. Micrographic and x-ray structure analysis of the films and microhardness determinations made it possible to establish the triangular phase diagram of the Zn—Cd—S system and to define clearly the regions of different phase compositions. Five regions were detected, each containing one, two, or three phases.

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L 00733-66

ACCESSION NR: AP5022738

Separation of sulfur crystals was observed in the (S + δ) phase region after aging the films of ternary Zn—Cd—S alloys for two years (δ-phase is a series of ZnS-CdS solid solutions). Sinusoidal cracks observed earlier in CdS films on ordinary glass substrate did not appear in the films on frosted glass substrate. Orig. art. has: 2 figures. [JK]

ASSOCIATION: Politekhnicheskiy institut im. V. I. Lenina, Khar'kov (Khar'kov Polytechnical Institute)

SUBMITTED: 01Apr65 ENCL: 00 SUB CODE: SS

NO REF SOV: 005 OTHER: 001 ATD PRESS: 4086

Card 2/2

L 25764-66

ACC NR: AP6016366 SOURCE CODE: UR/0070/65/010/003/0399/0404

AUTHOR: Palatnik, L. S.; Naboka, M. N.; Gladkikh, N. T.

ORG: Khar'kov State University im. A. M. Gor'kiy (Khar'kovskiy gosudarstvennyy universitet); Polytechnic Institute im. V. I. Lenin (Politekhnicheskiy institut)

TITLE: Study of the aging process of vacuum condensates

SOURCE: Kristallografiya, v. 10, no. 3, 1965, 399-404

TOPIC TAGS: solid solution, cadmium, sulfur, spherulite, hardness, metal crystal

ABSTRACT: The condensation mechanism and structural conversions occurring in condensates of pure sulfur and its alloys in various concentrations are studied after ageing two years at room temperature. When solid solutions of Cd-S age, they decompose, and filamentary and conical cadmium crystals are formed (5 to 18 at. % S and 50 at. %S, resp.). When the sulfur content is 70 to 80 at. %, the sulfur recrystalizes. Filamentary crystals of antimony form when Sb-Se alloys age over a period of 5 years. Sulfur condenses as a liquid from the vapor phase on a glass substrate at 20°C; at - 80°C, the vapor condenses in crystals. Spherulites form in sulfur films deposited on molybdenum substrates at - 80°C and in deposits of sulfur alloys of Cd, Zn, and Sb-Se at - 20°C on polished glass. Curves of microhardness as a function of composition are plotted for Cd-S. Orig. art. has: 6 figures and 1 table. [JPRS]

SUB CODE: 20 / SUBM DATE: 01Jul64 / ORIG REF: 009

Card 1/1 UDC: 548.526

NABOKA, M V

N/5
615.918
.N11

Oberflachenbrennharten; gezeigt an Beispielen aus der Huttenidustrie, Leipzig, Fachbuchverlag, 1955.

126 p. Illus., Diagrs., Tables.

Translation from the Russian:

Plamennaya poverkhnostnaya Zakalka Detaley oborudovaniya v metallurgicheskoy promyshlennosti, 1951.

"Literatur": p. 69

NABOKA, M. V.

N/5
615.918
.N1

Nomenklaturnyy spisok detaley oborudovaniya, podlezhashchikh plamennoy poverkhnostnoy zakalke (Classed List of Equipment Subject to Flaming Case Hardening, by) M. V. Naboka, I. I. Rodzevich, A. H. Khodak. Khar'kov, Metallurgizdat, 1952.

71 p.

At head of title: Russia. Nauchnoissledovatel'skoye byuro organizatsiy proizvodstva chernoy metallurgii.

POZHARSKIY, F.T.; NABOKA, N.F.

Synthesis of N-acylindazoles and 6-acylaminoindazoles with furan nuclei. Zhur.ob.khim. 31 no.6:1934-1936 Je '61. (MIRA 14:6)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Indazole) (Furan)

NABOKO, Sofiya Ivanovna; MARENINA, T.Yu., red. izd-va; AVER'YEV, V.V., otv. red.; UL'YANOVA, O.G., tekhn. red.

[Hydrothermal metamorphism of rocks in volcanic areas] Gidrotermal'nyi metamorfizm porod v vulkanicheskikh oblastiakh. Moskva, Izd-vo AN SSSR, 1963. 170 p. (MIRA 16:10)
(Metamorphism (Geology))

NABOKA, V. A., SAFRONOV, B. G., KALMYKOV, A. A., TIMOFEYEV, A. D., PANKRAT'YEV, YU. I., TERESHIN, V. I., TRUBCHANINOV, S. G., NOXRACHEV, M. G.,

"Plasma Guns Investigation,"

report presented at the 6th Intl. Conf. on Ionization Phenomena in Gases, Paris France, 8-13 Jul 63

ACCESSION NR: AP4040301 S/0057/64/034/006/1005/1010

AUTHOR: Kalmy*kov,A.A.; Trubchaninov,S.A.; Naboka, V.A.; Zlatopol'skiy,L.A.

TITLE: Structure and energy spectra of plasma bursts from a coaxial plasma gun

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.6, 1964, 1005-1010

TOPIC TAGS: plasma, plasma source, plasma jet, plasma concentration

ABSTRACT: The mass and energy spectra of the ions in the plasma bursts from a coaxial plasma gun were determined with a time of flight mass spectrometer and electrostatic analyzer described elsewhere (A.A.Kalmy*kov, A.D.Timofeyev et al,PTE,No.5,. 142,1963). The attenuation of 3 cm and 8 mm microwaves by the bursts was also observed, and the visible radiation was recorded with a photomultiplier. The plasma gun was 17.5 cm long, and the coaxial cylindrical electrodes were 3 and 7.5 cm in diameter. The gun was powered by a 12 microfarad capacitor charged to 10 to 20 kV, and the period of the circuit was 7 microsec. Approximately 1 cm^3 of hydrogen (standard conditions) was admitted to the gun through a pulsed valve. Two quite different modes of operation were noted, depending on the delay between admitting the gas and firing the gun. When this delay was greater than a certain critical value,

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ACCESSION NR: AP4040301

a single dense burst was ejected at a velocity of about 10^7 cm/sec. The density of this burst was at least 10^{14} cm^{-3}, but it contained no ions with energies greater than 100 eV. The operation under these conditions was not investigated in detail, but it appeared to conform to the theory of L.C.Burkhard and R.H.Loveberg (Phys.Fluids 53,341,1962). When the delay was less than the critical value, two bursts were ejected, of which the more rapid had a density of 10^{13} cm^{-3} and contained ions with energies up to 20 keV. The energy spectra of these bursts varied only slightly when other operating conditions were changed, provided only the delay time remained less than the critical value. The ions were all accelerated simultaneously (within 0.5 microsec) during the first half cycle. The moment of origin of the ions was marked by a slight but very sudden decrease of the discharge current, occurring near the first peak. Heavy impurity ions, presumably originating in the insulation and the valve packing, were present in considerable numbers. These had the same energy distribution as the protons, and hence smaller velocities. The burst could therefore in principle be purified by permitting it to drift a sufficient distance. In the absence of a magnetic field (all the work reported was performed with no longitudinal magnetic field) nearly all the low energy ions, and none of the high energy ions, were lost during traversal of one meter. This is presumably due to the better collimation of the high energy ions. It is suggested that the difference between the two

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ACCESSION NR: AP4040301

modes of operation is due to the interaction of the charged particles at high densities: when the delay time is short the density is moderate and the particles are accelerated essentially individually; when the delay time is long the density is sufficient for the interactions to become important, and they may be taken into account by a magnetohydrodynamic theory such as that of Burkhard and Loveberg (loc. cit.). "In conclusion, the authors consider it a pleasant duty to express their gratitude to B.G.Safronov for fruitful discussions and his interest in the work." Orig.art.has: 6 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 22Jul63 DATE ACQ: 19Jun64 ENCL: 00

SUB CODE: ME NR REF SOV: 003 OTHER: 002

Card 3/3

L 26973-65 EWT(1)/EPA(sp)-2/T/EEC(t)/EPA(w)-2/EWA(m)-2 Pz-6/Po-4/Pab-10/
Pi-4 IJP(c) AT

ACCESSION NR: AP5003259 S/0057/65/035/001/0169/0172

64
47
B

AUTHOR: Kalmykov, A.A./ Trubchaninov, S.A./ Naboka, V.A.

TITLE: On development of instability in a plasma burst during its motion in a longitudinal magnetic field

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 169-172

TOPIC TAGS: plasma, plasma instability, plasma injection, plasma rotation, magnetic mirror

ABSTRACT: Plasma bursts from a coaxial plasma gun fired by the 18 kV discharge of a 12 microfarad capacitor bank were observed with a "plasmascope" as they moved in a (not always uniform) longitudinal magnetic field. The purpose of the observations was to investigate such instabilities of the plasma bursts as might develop. When a plasma burst traversed a magnetic barrier in which the field strength increased to a maximum value of 1600 Oe and decreased again to a low value in a distance of 50 cm, the core of the burst decreased in size but a halo of presumably less dense plasma formed and grew. At certain values of the magnetic field a spiral protuberance formed and increased in size. Such protuberances continued to develop when the

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ACCESSION NR: AP5003259

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plasma burst was moving in a uniform field. The direction of the spiral protuberance depended on the direction of the magnetic field and corresponded to a rotation of the plasma in the direction of the Larmor rotation of the ions. The observed instability is believed to be of the Rayleigh-Taylor type and a consequence of rotation of the plasma burst. The cause of the plasma rotation is not known, but drift forces due to the crossed fields resulting from uncompensated space charge in the plasma may be involved. The instability develops under a wide variety of conditions and is expected to complicate the problem of injecting plasma into a magnetic mirror system. "In conclusion I express my gratitude to B.G.Safronov for his interest in the work and for fruitful discussions." Orig.art.has: 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR, Khar'kov(Physicotechnical Institute, AN UkrSSR)

SUBMITTED: 09Mar64 ENCL: 00 SUB CODE: ME

NR REF SOV: 005 OTHER: 009

Card 2/2

L 24049-66 EWT(1)/ETC(f)/EPF(n)-2/EWG(m) IJP(c) GS/AT/GM

ACC NR: AT6008845 SOURCE CODE: UR/0000/65/000/000/0078/0086

AUTHOR: Kalmykov, A. A.; Trubchaninov, S. A.; Naboka, V. A. 71 B+1

ORG: none

TITLE: Interaction between plasmoids of a magnetic field of acute-angled geometry

SOURCE: AN UkrSSR. Magnitnyye lovushki (Magnetic traps). Kiev, Naukova dumka, 1965, 78-86

TOPIC TAGS: magnetic field, plasmoid, magnetic trap, magnetic field intensity

ABSTRACT: The authors study capture of a plasma 2/ in an acute-angled trap 2/ using methods which permit measurements for particles with various energies for a more detailed investigation of the mechanism responsible for the interaction between a plasmoid and a magnetic field of acute-angled geometry. The acute-angled magnetic field was produced by the appropriate connection of two coils. Maximum field intensity was approximately 6000 oersteds. A drift spectrometer and a plasmascope were used for an experimental investigation of the plasma emerging from the trap. It was found that paraxial ions escape from the trap along the axis, i. e. ions which are in motion in the region near the axis and make an extremely small angle with the axis. The energy spectra of hydrogen ions from plasmoids after passage through a magnetic field of acute-angled geometry were compared with similar spectra for ions after passage through—

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L 24049-66

ACC NR: AT6008845

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a homogeneous magnetic field of the same intensity. It was found that the acute-angled field cuts off the high energy ions. Energy spectra are also given for plasmoid protons after emergence from an acute-angled trap as a function of magnetic field strength. These curves show a reduction in the number of ions passing through the trap as the magnetic field strength is increased. An analysis of the experimental plasmograms shows that the plasma is initially pinched as it enters the trap and that the central part of the plasma then moves along the axis. A halo forms around this dense central section with a radius which increases with motion along the axis in spite of a simultaneous increase in the magnetic field intensity. The generation of this halo and the increase in its diameter may be due to rotation caused by some mechanism which converts the longitudinal edge component to a transverse component. The experimental data show that the leading edge of an acute-angled plasmoid is not captured and passes through the end of the trap. A more detailed study of the interaction between plasmoids and an axially symmetric magnetic field is needed for determining conditions necessary for trapping a fast plasma. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 20Oct65/ ORIG REF: 007/ OTH REF: 001

Card 2/2 dda

L 43911-66 EWT( ) IJP(c) ( )AT
ACC NR: AT6020466 (N) PUBLISHER CODE: UR/0000/65/000/000/0089/0102

69
B+1

AUTHOR: Kalmykov, A. A.; Trubchaninov, S. A.; Naboka, V. A.

ORG: none

TITLE: Development of instability in a plasmoid upon injection in an axially-symmetrical magnetic field

SOURCE: AN UkrSSR. Issledovaniye plazmennykh sgustkov (Study of plasma clusters). Kiev, Naukova dumka, 1965, 89-102

TOPIC TAGS: plasmoid, plasma instability, plasma injection, plasma diagnostics, magnetic pinch, magnetic mirror

ABSTRACT: The present investigations were made with a coaxial plasma gun which produced hydrogen plasmoids of density up to 10^{13} cm^{-3} and velocities (7-8) x 10^7 cm/sec (Fig. 1). The magnetic field was produced at a distance (100 cm) sufficient for attenuation of the currents captured by the plasmoid. In view of the fact that the front part of the plasmoid did not have sufficient luminosity, the structure of the plasmoid was investigated with a plasmascope first described by L. A. Yel'yarov and A. V. Zharinov (Nucl. Fus. 1962, suppl. 2, 699). The field distribution was measured with the aid of probes. The results showed that the behavior of the plasmoids in the non-uniform magnetic field was very similar to that occurring during rapid compression of the plasma in a θ pinch, and the test results are interpreted in light of this phenomenon. The possible causes of the instability of the plasmoid upon enter-

Card 1/2

L 05787-67 EWT(1) IJP(c) AT

ACC NR: AT6033190 SOURCE CODE: UR/3137/65/000/270/0001/0020

AUTHOR: Khizhnyak, N. A.; Kalmykov, A. A.; Trubchaninov, S. A.; Naboka, V. A.

54
57
B+1

ORG: none

TITLE: On the adiabatic movement of plasma beams in a longitudinal magnetic field

SOURCE: AN UkrSSR. Fiziko-tekhnicheskiy institut. Doklady, no. 270/R057, 1965. K voprosu ob adiabatichnosti dvizheniya plazmennykh sgustkov v prodol'nom magnitnom pole, 1-20

TOPIC TAGS: plasma beam, longitudinal magnetic field, plasma density

ABSTRACT: The author discusses the entry mechanism of small plasma beams into an axially symmetrical magnetic field, depending on the particle density in the beam. The deductions from the theory are compared with an experimental study of magnetic moments of low- and high-density plasma beams. The experiments are found to agree with the theory on the substantial influence of plasma density on the magnetic moment of the plasma beam, and with the theory of the

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L 05857-67

ACC NR: AT6033190

dynamic interaction of beams with an axially symmetrical magnetic field. The model of a generalized current loop used in calculations can therefore be considered a satisfactory approximation of the description of plasma beams. In conclusion, the authors express their deep gratitude to K. D. Sinel'nikov, academician of the AN USSR, and to R. G. Safronov and V. S. Komel'kov for fruitful discussions which stimulated this work in many ways. Orig. art. has: 7 figures and 30 formulas.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 013/ OTH REF: 006/

Card 2/2 egh

ACC NR: AP6031269 SOURCE CODE: UR/0057/66/036/009/1652/1664

AUTHOR: Khizhnyak,N.A.; Kalmykov,A.A.; Trubchaninov,S.A.; Naboka,V.A.

ORG: none

TITLE: On the adiabaticity of the motion of plasma bursts in longitudinal magnetic fields

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 9, 1966, 1652-1664

TOPIC TAGS: hydrogen plasma, dense plasma, rarefied plasma, plasma dynamics, adiabatic process, plasma magnetic field, nonhomogeneous magnetic field, magnetic moment

ABSTRACT: This paper is concerned with the motion of plasma bursts along the axis of a longirudinally inhomogeneous axially symmetric magnetic field. The pliant current-loop model, developed in a series of articles by N.A.Khizhnyak, V.G.Safronov, and K.D.Sinel'nikov (Sb. "Fizika plazmy i problemy upravlyayemogo termoyadernogo sinteza", t.I. Izd-vo AN UkrSSR, Kiyev, 1963; ibid. t. II, 1964; ZhTF, 35, 827, 1965; ZhTF, 35, 833, 1965), is generalized to take into account changes in the shape of the plasma. Equations of motion are derived under the simplifying assumptions that the deformation of the plasma is small, the plasma remains spheroidal (but may become either prolate or oblate), and the thermal expansion of the plasma during its interaction with the magnetic field is negligible. Particular attention is given to the magnetic moment of the plasma burst as a criterion of the adiabaticity of its motion. For a low density

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plasma, the equations of the generalized pliant current loop model reduce to those of the independent particle model and the magnetic moment should remain constant as long as the usual adiabaticity condition is met. The magnetic moment of a dense plasma, on the other hand, should increase as the plasma moves into regions of higher magnetic field strength until it encounters a magnetic field of a critical strength, when the plasma should collapse and its magnetic moment should decrease rapidly. The theoretical predictions were tested experimentally. Hydrogen plasma bursts from a coaxial plasma gun, after traversing a 1 m long drift tube, entered the field of a series of six 17 cm long 8 cm inner diameter direct current solenoids, each capable of producing a 10 kOe field. The magnetic moments of the plasmas were measured with the aid of an external loop and internal magnetic probes that could be adjusted in the radial direction. The densities of the plasmas were determined with a shielded electrical probe, by cutoff of 3 and 0.8 cm microwaves, and with a 3 cm wavelength interferometer. The plasmas were found to behave in accordance with the theory. In particular, the magnetic moments of the plasmas with densities below 10^{12} cm^{-3} remained constant until fields of the critical strength were encountered and then decreased monotonically and fairly rapidly, whereas the magnetic moments of the plasmas with densities above 10^{14} cm^{-3} increased as the plasmas moved into regions of higher field strength, even though the independent particle adiabaticity condition was better satisfied by the high density plasmas than by the low density ones. It is concluded that the generalized current loop model provides a rather good approximate description of the behavior of plasma bursts. The work of several other investigators is discussed in the light of the present theory, and it is concluded that the plasma entrapment mechanism proposed

by J.L.Tuck (Phys. Rev. Lett., 3, 317, 1959) can be effective only under such conditions that the plasma traverses the magnetic field gradient region in a time shorter than the collapse time of the plasma, which is approximately the ratio of the plasma circumference to the Alfven velocity. The authors thank B.G.Safronov, V.S.Komel'kov, and Academician K.D.Sinel'nikov of the AN UkrSSR for fruitful discussions. Orig. art. has: 38 formulas and 7 figures.

SUB CODE: 20 SUBM DATE: 04Sept65 ORIG. REF: 011 OTH REF: 008

KHALDIN, A.K., polkovnik meditsinskoy sluzhby; MABOKIN, A.N., kapitan intendantskoy sluzhby

Re-equipping operating rooms. Voen.-med.zhur. no.7:9-12 Jl '57.
(OPERATING ROOMS,
equipment (Rus))

NABOKIN, N.I., inzh.; KISELEV, G.P., kand. tekhn. nauk

Chemical method of rod fastening. Shakht. stroi. 7 no.3:19-20 Mr'63 (MIRA 17:7)

1. Leningradskiy gornyy institut (for Nabokin). 2. Leningradskiy inzhenerno-stroitel'nyy institut (for Kiselev).

ALTAYEV, Sh.A , kand.tekhn.nauk; POLOZHIY,F.M.; MASTER,A.Z.; ZHISLIN,I.M.; SHAPOSHNIKOVA, I.I.; NABOKIN, V.F.; MAKSIMOVA, A.I.; BOYKO, A.A., red.; LERNER, B.I., red.; MIROSHNICHENKO, V.D., red. izd-va; LOMILINA, L.N., tekhn. red.

[Karaganda soil basin; reference book] Karagandinskii ugol'nyi bassein; spravochnik. Pod obshchei red. A.A.Boiko i B.I. Lernera. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1962. 367 p. (MIRA 15:3)

1. Karagandinskiy khimiko-metallurgicheskiy institut Akademii nauk Kazakhskoy SSR (for Altayev). 2. Karagandinskiy sovnarkhoz (for Polozhiy, Master, Zhislin, Shaposhnikova). 3. Kombinat Karagandaugol' (for Nabokin). 3. Karagandinskiy nauchno-issledovatel'skiy ugol'nyy institut (for Maksimova).
(Karaganda Basin--Coal mines and mining)

VASILEVSKAYA, N.Ye.; N.BOKINA, L.K.

Data on the interaction of nutritional and anti-defensive conditioned reflexes. Nerv. sist.(Leningr.) 2 no.[illegible] '62.
(MIRA 17:7)

1. Laboratoriya fiziologii vysshey nervnoy deyatel'nosti Fiziologicheskogo instituta imeni I.P.Pavlova Leningradskogo gosudarstvennogo universiteta.

MAZINA, Ye.G., kand.med.nauk., MUSATOVA, A.V., KHRAMOVA, M.I., NABOKINA, Ye.K. SKOPTSOVA, S.M., KUZNETSOVA, S.A., KARPEL', L.M., DAMANSKAYA, N.V. FILIPPOVA, T.V.

Effectiveness of epidermal vaccination of newborns. Vop.okh. mat. i det. 3 no.6:53-58 N-D '58 (MIRA 11:12)

1. Iz Yakutskogo filiala (dir. Ye.N. Andreyev) Instituta tuberkuleza AMN SSSR.
(TUBERCULOSIS--PREVENTIVE INOCULATION)

NABOKO I.M.

AUTHOR SALAMANDRA G.D. and NABOKO I.M. PA - 2553

TITLE Determination of Fuel Dispersion by means of capture on the Soot Covered Plate. (Ulavlivaniye na plastinku, pokrytuyu sloyem sazhi, kak metod opredeleniya krupnosti raspylivaniya topliva.- Russian.)

PERIODICAL Zhurnal Tekhn. Fiz. 1957, Vol 27, Nr 3, pp 614 - 618 (U.S.S.R.)

Received: 4/1957 Reviewed: 5/1957

ABSTRACT Since the process of the formation of traces was not with by other authors who studied the method of capture the authors thoroughly investigated a with domain of layer thicknesses of soot. In order to come as close as possible to reality, they were carried out with very small particles. Their size was 0,3 - 0,8 mm. The arrangement and the carrying out of the experiment are decribed. The photographs were taken with a high-speed camera and a cine-camera. Measuring errors were less than $\pm$ 4 μ. The experiments with the thin soot layers (smaller than the diameter of the drop) showed that the traces of the drops had one diameter and that they satisty Stocke's ralation quite satisfactority. The second group of drops with a diameter of 400 - 800 μ and a velocity of up to 5 m/sec. showed traces with two diameters, an inner and an

CARD 1/2

Determination of Fuel Dispersion by means of capture on the Soot Covered Plate.

outer one. The third group of drops with a diameter of 250-400 μ and a velocity of 5-7 m/sec. on the soot layer of a thickness that was 1,5 to 2 times the diameter of the drop, on the occasion of sinking into the layer showed traces the measurements of which were the same as those of the drop. The essential factors of the process of trace formation are the velocity of the drop and the relative thickness of the soot layer. The number We is apparently not sufficient for the characterization of the process of trace formation on the soot layer.
(With 2 illustrations)

ASSOCIATION: Energetic Institute Krzhizhanovskiy of the Academy of Science of the USSR.
SUBMITTED: July 3rd, 1956.
PRESENTED BY: -
AVAILABLE: Library of Congress.

NABOKO, I. M.

AUTHOR SALAMANDRA G.D. and NABOKO I.M. PA - 2554

TITLE High-Speed Microphotographing of Dispersed Liquid Drops during the Flight. (Skorostnoye mikrofotografirovaniye kapel' raspylënnoy zhidkosti v polëte.- Russian.)

PERIODICAL Zhurnal Tekhn. Fiz. 1957, Vol 27, Nr 3, pp 619 - 623 (U.S.S.R.)

Received: 4/1957 Reviewed: 5/1957

ABSTRACT The authors described how to determine the size of the particles of a dispersed fuel by means of high-speed microphotography of the liquid drops during flight. As it is difficult to produce a bright flash of light with a duration of less than 10^{-6} sec., the athempt was made to use a light source with a duration of 10^{-6} - 10^{-5} sec. in order to obtain clear microphotos of the fuel drops by taking the pictures not on a steady film but on one that moves in the direction in which the pictures shift. The device is described by means of which it was possible to take 7-8 microphotos 5 times enlarged during one exposure. In consisted of an electric and an photographic part and an apparatus which serves for the investigation of the disruptive strength of cables served as a high-frequency source. The current was rectified by means of a Renotron according to a oneperiodic scheme. One of the electrode of the discharger was made of Tungsten, the other of brass. Hydrogen was used as filling gas. Behind the ocular of the microscope a photo-

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High-Speed Microphotographing of Dispersed Liquid Drops during the Flight.

recorder was mounted (a drum of a diameter of 19 cm). On its surface the light - sensitive film was fixed. Recording frequency was determined by the linear velocity of the film motion. Drop velocity was 16 m/sec for the five times enlarged picture. The authors were able to state that not all drops that were within the range of sight moved with the same velocity in spite of the relatively small range of sight which was 5 x 5 mm for the five times enlarged pictures. (With 3 illustrations)

ASSOCIATION: not given.
PRESENTED BY: -
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AVAILABLE: Library of Congress.

CARD 2/2

SOV/120-59-2-37/50

AUTHORS: Salamandra, G.D., Nabcko, I.M. and Sevast'yanova, I.K.

TITLE: A Pulsed Source of Frequently Repeating Flashes of Light (Impul'snyy istochnik chasto povtoryayushchikhsya vspyshek sveta)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 2, pp 124-127 (USSR)

ABSTRACT: Demountable pulsed lamps of original construction are described. Using these lamps, cinephotography may be carried out at 100,000-150,000 frames/sec. The exposure does not exceed 5 x 10-7 sec. The construction of a linear source is shown in Fig 1a. The discharge takes place between the tungsten electrode, 9, and the brass plate, 10. The length of the spark gap is 20 mm. The tungsten electrode is connected to the lining of the condenser, 4, via the contact ring, 14. The high voltage is applied via the terminals, 2 and 12. The lamp was filled with hydrogen at a pressure of one atm. In the visible part of the spectrum the emission of the lamp is continuous in the interval 4000-6500 Å. The ceramic condensers used had a capacity of 0.0052 μF and the working voltage was 25 kV. Hydrogen is

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A Pulsed Source of Frequently Repeating Flashes of Light

preferred to xenon because deionisation is faster in hydrogen. The length of the lamp is about 30 cm. The lamps have been used to investigate combustion processes in explosive mixtures. The basic circuit for synchronising the explosion with the illuminating flashes is shown in Fig 2. A battery of condensers C_1 whose capacity is 1.05 μ F, is charged up to 22-25 kV. The spark gap A is so chosen that the system is in an "expectation" state. The discharge is initiated by the shutter plate, moving in the direction of the arrow, which closes the primaries of the transformers T_1 and T_2. When the primary of the transformer T_1 is closed a spark is produced across the spark gap A. The condenser battery C_1 then discharges through R_1 and charges up the ceramic condenser of the lamp. The repetition frequency of the flashes depends on the magnitude of R_1. This frequency does not remain constant: the greater the ratio of the capacity of C_1 to that of the lamp condenser the smaller is the change in the frequency and the greater is the total number of flashes in the series. In the case when this ratio is

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about 200 the total number of illuminating flashes is about 500. The closure of the secondary of the transformer T_2 fires the explosive mixture to be investigated. By adjusting the position of contacts, the flashes may be synchronised with a particular part of the explosive process. Typical photographs are shown in Figs 3-5. A.S. Predvoditelev and Kh.S. Valiyev are thanked for interest and assistance respectively. There are 5 figures and 9 references, of which 4 are Soviet and 5 are English.

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ASSOCIATION: Energeticheskiy institut AN SSSR
(Power Institute, Ac. Sc. USSR)

SUBMITTED: April 13, 1958

M.

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PHASE I BOOK EXPLOITATION SOV/4913

Salamandra, Genriyetta Davydovna, Tat'yana Valerianovna Bazhenova, Sergey Grigor'yevich Zaytsev, Pem Ivanovich Soloukhin, Ideya Mikhaylovna Naboko, and Irina Konstantinovna Sevast'yanova.

Nekotoryye metody issledovaniya bystroprotekayushchikh protsessov i ikh primeneniye k izucheniyu formirovaniya detonatsionnoy volny (Some Research Methods for Transient Processes and Their Application to the Study of Detonation-Wave Development) Moscow, Izd-vo AN SSSR, 1960. 91 p. Errata slip inserted. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Energeticheskiy institut imeni G. M. Krzhizhanovskogo.

Resp. Ed.: A. S. Predvoditelev, Corresponding Member, Academy of Sciences USSR.; Ed. of Publishing House: Ya. A. Klimovitskiy; Tech. Ed.: V. Karpov.

PURPOSE: This book is intended for engineers and scientists engaged in developing research techniques and performing experimental

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Some Research Methods (Cont.) SOV/4913

studies in the field of shock and detonation phenomena in gas-dynamic processes.

COVERAGE: The book contains the results of original research on methods for investigating transient combustion processes and on the development of detonations under various gasdynamic conditions. The book reviews circuits of spark discharge apparatus and circuits for synchronizing a series of illuminating flashes with the process being investigated. Pulse light sources operating in the regime of frequently repeated flashes are described. A description is also given of simple apparatus designed by the authors for obtaining series of Schlieren photographs with a frequency of 50,000 to 100,000 frames per second for exposures of the order of 10^{-7} sec permitting easy synchronization of the exposure with any gasdynamic process. The construction is shown and an analysis is given of the operation of a piezoelectric pressure transducer which permits reproducing without distortions the shape of a pressure pulse in the case of gasdynamic disturbances.

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With the aid of the investigation methods developed, a detailed study was undertaken of the mechanism of a detonation occurring during propagation of a flame in a tube and of supersonic flow of gas mixtures capable of reaction in a shock tube. The first chapter was written by G. D. Salamandra; in it a detailed review of various methods used to produce spark photographs of transient processes is given. Certain difficulties which had to be met in the course of the investigations are described and methods for surmounting them are demonstrated. The second chapter, written by S. G. Zaytsev, describes methods for measuring rapidly varying pressures, developed by the Power Engineering Institute of the Academy of Sciences USSR for investigation of the state of gas in shock tubes. The methods have found wide application. The third chapter presents the results of the investigations conducted with the aid of the methods discussed on the mechanism of the development and propagation of detonation waves under various hydrodynamic conditions. These investigations were recently completed at the laboratory for combustion physics by T. V. Bazhenovaya, G. D. Salamandra, R. I. Soloukhniy, S. G. Zaytsev, I. M. Naboko, and I. K. Sevost'yanovaya. Of particular interest

are those investigations which pertain to the conditions of compatibility of the hydrodynamic state of the medium and the chemical process. A. S. Predvoditelev, Professor, Corresponding Member of the Academy of Sciences USSR, wrote the preface. There are 79 references: 41 Soviet (3 of which are translations), 22 English, 13 German, and 3 French.

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PHASE I BOOK EXPLOITATION SOV/5698

Akademiya nauk SSSR. Energeticheskiy institut.

Fizicheskaya gazodinamika i teploobmen (Physical Gas Dynamics and Heat Exchange) Moscow, 1961. 112 p. Errata slip inserted. 4,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Energeticheskiy institut im. G. M. Krzhizhanovskogo.

Resp. Ed.: A. S. Predvoditelev, Corresponding Member, Academy of Sciences USSR; Ed. of Publishing House: S. L. Orpik; Tech. Ed.: S. P. Golub'.

PURPOSE : This book is intended for engineers and scientific workers interested in supersonic flow of gases, aerodynamic heat phenomena, and the dissociation of gases.

COVERAGE: This collection consists of 15 papers written at the Laboratoriya fiziki goreniya Energeticheskogo instituta Akademii

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nauk SSSR (Laboratory of Combustion Physics of the Power Institute of the Academy of Science USSR) on investigations on the physics of gas dynamics and phenomena of heat exchange in supersonic flows. In the field of physical gas dynamics motions of the medium with possible transformations of the substance, not excluding such processes as the thermal ionization of molecules and atoms, are discussed. No personalities are mentioned. References follow most of the articles.

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